T Plant gets crucial equipment for handling K Basins sludge

The T Plant complex has several important roles in Hanford's cleanup mission. It treats, verifies and repackages contact-handled waste, samples waste drums, decontaminates equipment and stores irradiated fuel assemblies from the Shippingport pressurized water reactor.

To prepare for one of its most crucial upcoming missions, the 850-foot-long T Plant Canyon Building is being prepared for the receipt and storage of radioactive sludge from the K Basins, scheduled to begin arriving at the plant next January. The work is a joint effort of Fluor Hanford's Spent Nuclear Fuel and Waste Management Projects.

The sludge will be held in steel containers in at least four T Plant cells. Some crucial equipment for the handling and storage of the sludge has arrived and is being staged, and a photographer was on hand to capture the event for the *Reach*.



Jim Smith hooks lifting devices to the leveling frame base in the T Plant tunnel in preparation for moving the 4-foot-tall, 176-square-foot frame into the canyon.



From left, FFS ironworkers Ray Darby and Mike Downing and laborer Jim Cockrum (holding pole), prepare to move a frame onto the T Plant canyon deck. Each frame weighs about 5,500 pounds, and each liner assembly weighs 13,700 pounds.



Fluor Federal Services ironworker Mike Aldrich (in striped vest) and boilermaker Jim Smith signal Fluor Federal Services crane operator Brian Lotze as a huge leveling frame is loaded onto a truck at Hanford's 200 West Area construction yard for delivery to T Plant. A cell liner assembly sits in the foreground. The tall section in the center of the liner is a 13-foot-high leak-detection and pump riser. Four such leveling frames and secondary containment liner assemblies have been constructed to fit into T Plant cells as part of equipment that will hold K Basins sludge.



Ray Darby (foreground) talks via radio to Fluor Hanford operator Mike Yencopal in T Plant's bridge crane cab, while Mike Downing holds a tag line on a liner as it is moved down the T Plant Canyon to a storage location.



Ray Darby talks via radio to FH bridge crane operator Mike Yencopal as another liner moves toward a storage location on the canyon deck. FH radiation control technician Mark Watkins (foreground, partially shown), along with

much of T Plant's staff and FFS construction building trades personnel, face a busy year. They will be installing, leveling and bracing the frames, installing cable trays, conduit and wiring for leak-detection systems, putting in controls and cameras for sludge monitoring and performing many other readiness tasks.